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MARINE INSECTS OF THE TOKARA ISLANDS

III. A NEW SPECIES OF *NOCTICANACE* FROM JAPAN (DIPTERA, CANACEIDAE)^{1) 2)}

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With 2 Text-figures

The Canaceidae is a small family including about 32 species, but it is widely distributed in the world and almost exclusively intertidal in habitat, excepting two fresh water species: *Procanace nigroviridis* CRESSON from the Hawaiian Islands and *P. opaca* DE MEIJERE from Java. Nothing has been hitherto reported concerning Japanese Canaceids. In the present paper, I intend to report as a first record a new species of *Nocticanace*, which was collected by Mr. S. UENO from a rocky coral reef of the Tokara Islands, Ryukyu. This study was undertaken under the direction of Prof. Dr. Masaaki TOKUNAGA, to whom I am very grateful for his kind guidance. I am also indebted to Mr. Shun-ichi UENO for his kind collection which made this study possible.

Nocticanace pacificus sp. nov.

Male and female:—Body about 1½ mm long, dull black; frons, mesonotum and scutellum brownish pollinose; mesonotum gray-dusted laterally; face, clypeus, cheeks, occiput, pleura and abdomen dusted with gray; face, cheeks and pleura more silvery pruinose; legs brownish black, weakly gray-dusted; wings and squamae faintly brown-grayish, hyaline; halteres yellowish; all bristles and setae black.

Head: Frons broader than long, nearly flat, its lateral sides converging ventrad; frontalia with a pair of strong, proclinate interfrontal bristles almost at level of anterior ocellus and midway between anterior ocellus and fronto-orbitals, and with a few setae at its anterior margin; ocellar triangle large; ocelli minute and widely spaced; preocellars strong, lateroclinated and located at middle of line between anterior and posterior ocelli; postocellars minute; one to three setulae at middle part of

1) Scientific Survey of the Tokara Islands, Report No. 17.

2) Contributions from the Entomological Laboratory, Saikyo University, Kyoto, No. 25.

triangle; parafrontals with three pairs of strong laterocline fronto-orbitals between which there are three pairs of setulae; inner and outer verticals strong. Face in profile convex, upper part between antennae swollen, bare. Antennae blackish brown; third segment longer than broad, round at tip, with microscopic pile; arista slightly longer than antennae, swollen at basal one-fourth, pubescent. Cheeks with three genal bristles in an oblique line from vibrissal angle to middle of lower eye margin; the anterior genal bristle grown down- and in-wards, the other two up-curved and with two setulae below and between bristles. Proboscis large, with pale brown fleshy labellae; palpi dark brown, with a seta at tip.

Thorax: Mesonotum with 1+3 pairs of dorsocentrals, one pair of humeral, one pair of posterior notopleural, one pair of presutural, one pair of supra-alars; post-alars two, outer one strong but inner minute; three to six setulae before the line between anterior dorsocentral and presutural, and a few setulae on humeri. Scutellum with four marginal scutellars, the basal pair directed backward and the apical pair strongly upward. Mesopleura and sternopleura each with one strong bristle, the former with two relative long setae above bristle along caudal margin and one in middle of ventral margin, and with a few scattered setulae, the latter with one fine seta.

Wing: Length about 2 mm; costa ending at end of M_{1+2} , but broken once before the end point of R_1 , length of section 2, 3 and 4 of costa about 8.7:1:1.5; r-m slightly before middle of cell $1M_2$.

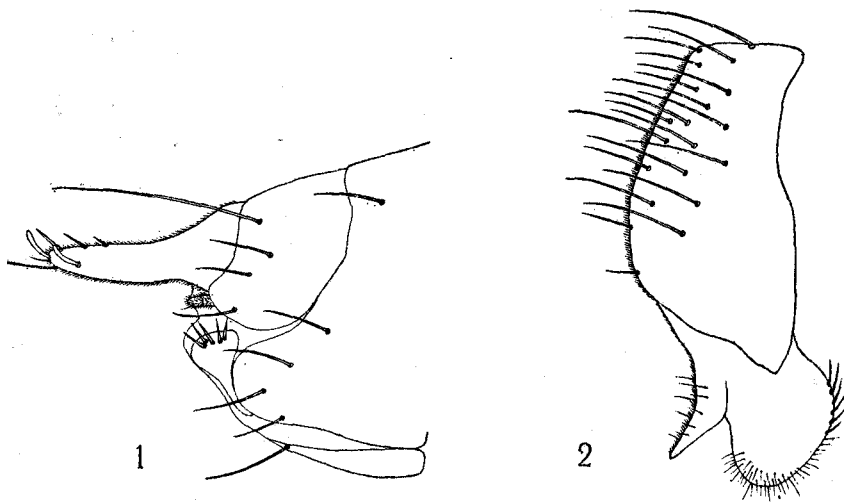
Leg: Anterior femora with dorso- and ventroposterior rows of about 4 (3-4) long curved bristles, other hairs on legs moderate; apical tarsal segments strongly flattened.

Abdomen: Abdomen with rows of strong setae. Seventh tergite of female strongly excised in middle, its sides with five pairs of setae; eighth tergite with a pair of long dorsal bristles reaching apex of lamellae; dorsal lamellae of ovipositor (Fig. 1) bifurcate, black, dusted with light gray, with apical dorsal and preapical lateral spines black, long and flattened, and with three spine-like dorsal setae; lobes of eighth sternite each bearing five black stout spines. Male genitalia (Fig. 2) with the ventral processes of ninth tergite somewhat constricted at base, then gradually expanded in an ovoid apical lobe, outer apical margin with slender hairs and inner surface covered with strong setae; anterodorsal margin of process near base with a long finger-like lobe with fine hairs on dorsal side.

Holotype: male; Nakanoshima Is., Tokara Islands, Ryukyu; June 10, 1953; S. UENO leg. *Allotopotype*: female. *Paratopotypes*: 7 males, 8 females, same date as holotype. *Type-specimens*: dry, deposited in the Entomological Laboratory, Saikyo University.

The present new species is very closely allied to *N. peculiaris* MALLOCH from the Marquesas Islands and *N. zimmermani* WIRTH from Rapa Island, their chaetotaxies

are almost identical but may be distinguished by the male and female genitaliae as follows:



Nocticanace pacificus sp. nov.

Fig. 1. female genitalia, lateral view.

Fig. 2. male genitalia, lateral view.

| | <i>peculiaris</i> | <i>zimmermani</i> | <i>pacificus</i> |
|--|--|--------------------------------------|---|
| Male, ventral processes of ninth tergite | ventromesal apex bluntly rounded | apex sharply pointed | apical lobe oval, anterodorsal lobe finger-like |
| Female, dorsal lamellae | slender, preapical seta on dorsal side | stout, preapical seta on dorsal side | moderately stout, preapical seta on laterodorsal side |
| eighth sternite | 6 spines | 4 spines | 5 spines |